

Name _____

- What is the building block for proteins? _____
 - What type of reaction occurs during the formation of proteins? _____
 - What is the name of the bond formed in making proteins? _____
 - What material is produced (or given off) when forming proteins? _____
 - Draw the general formula of an amino acid (use R as the functional group):
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- Draw the following amino acids:
 - Alanine
 - Arginine
 - Asparagine
 - Explain what a dipeptide and a polypeptide are:
 - There are two ends to any polypeptide. What are those ends and how are they to be oriented on your paper?
 - What is meant by essential and non-essential amino acids?
 - What is a complete and a non-complete protein?
 - Briefly describe the three functions of proteins in the body:
 - Zwitterion
 - Buffer Action
 - Isoelectric Point

Take the following amino acids (which are given in the powerpoint, and in the Chemistry Data Booklet (19.2)) and form either the dipeptide or polypeptide chains. **AND give the amino acid sequence using the 3 letter abbreviations (ex. #1 Glu-Gly)**

- ### 12. Glutamic Acid + Glycine

- ### 13. Lysine + Argenine

- #### 14. Cysteine + Alanine

15. Tryptophan + Valine + Methionine

16. Proline + Serine + Threonine

17. Isoleucine + Glutamine + Histidine

18. Aspartic Acid + Asparagine + Leucine + Phenylalanine + Tyrosine